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There is an urgent need to promote racial equity on college campuses. This article describes the EQUIP learning community model for creating such changes.

In Short:

- Quick workshops on implicit bias and microaggressions do not result in lasting, sustainable, improvements.
- Meaningful change towards anti-racist practices take time. There are no quick fixes.
- EQUIP learning communities organize faculty members to work together to promote anti-racist teaching.
- Participation in EQUIP learning communities result in lasting, meaningful changes to both faculty beliefs and practices.

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TITLE AND BYLINE

Not another bias workshop: Using equity analytics to promote anti-racist teaching

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ABSTRACT

This article describes an approach to faculty professional development that is grounded in data analytics generated by the EQUIP observation tool (https://www.equip.ninja). EQUIP is a free, open source, and fully customizable tool for tracking racialized patterns of participation in classrooms. EQUIP has been used on a variety of campuses to provide professional learning opportunities to help faculty members enhance their anti-racist teaching practices in as little as five hours in a single semester. The impact is enhanced even further when faculty participate in this process over multiple semesters. Evidence shows that EQUIP helps faculty develop both new teaching practices and more sophisticated beliefs around anti-racist teaching. We provide guidance for this model to be adopted widely across campuses.

ARTICLE BODY

The fight for racial justice has come to the fore on college campuses. The existence of racist structures and discourses is indisputable, but the path forward is less clear. A common approach is to hold one-off seminars, workshops, or lectures that address topics such as implicit bias and microaggressions—or what might be called the "inoculation model" (Shah et al., 2021). This approach is appealing because it is relatively low-cost and easy to deploy, and it gives a feeling that *something is being done*. However, the impact of these efforts is dubious at best (Chang et al., 2019) and potentially harmful at worst, as these isolated efforts bring racial tensions to the fore yet do little to address them. There are no shortcuts to achieving racial equity–only consistent, focused work can change oppressive conditions.

To promote meaningful learning opportunities for instructors, we have created an approach called *equity analytics* (Reinholz & Shah, 2018). Equity analytics focuses on providing instructors with actionable data that illuminates inequities in a context that matters to them–their own classrooms. Given the prevalence of color-evasive ideologies in academia (Annamma et al., 2017), racialized experiences are too often *out of sight and out of mind* for the predominantly White faculty on our campuses. Of course, racism cannot be reduced to a collection of statistics. Still, these kind of data can help make the effects of racism concrete, countering overly theoretical, broad, and disconnected ways of talking about racial equity. Our research demonstrates how when equity analytics are embedded into a professional learning community, faculty can make impressive changes to their teaching practices after as little as five hours of learning community meetings (Reinholz et al., 2020). Because faculty engage in ongoing practice with community support and customized feedback, the time they spend is far more productive than a single condensed workshop. The benefits are further enhanced when faculty participate over multiple semesters.

Here, we introduce EQUIP (https://www.equip.ninja), a free, open source, and highly customizable tool used to generate racial equity analytics. Drawing on our prior work, we provide concrete examples of faculty experiences using EQUIP across disciplines. We close with suggestions for institutionalizing the use of equity analytics on campus.

Background

Race, Participation, and Racialized Classroom Spaces

The prevailing wisdom remains that classrooms are culturally neutral spaces. In contrast, research shows that students' classroom experiences are racialized, often in subtle ways invisible to an instructor (e.g., interpersonal microaggressions; Suárez-Orozco et al., 2015). We use classroom participation as a window to help instructors see teaching and learning as racialized phenomena. Participation is important in its own right, as it is linked to both student learning and identity development (Nasir & de Royston, 2013; Webb et al., 2019). Moreover, participation is tangible, relatively easy to measure, and it is within an instructor's locus of control.

Although "anti-racism" is a multidimensional, multiscalar concept, in this specific context we examine anti-racism at the level of racially minoritized students' participation in classrooms. That is, when provided with data describing racial inequities in the participation

patterns of their own classrooms, instructors can practice anti-racism by changing their teaching practices to attenuate those inequities. For instructors, focusing on participation can also become an entry point to deeper conversations about the myriad ways that race (and intersecting social markers like gender, class, and disability) manifest in education.

Racial inequities in classroom participation are well documented (e.g., McAfee, 2014; Reinholz et al., 2020; Shah et al., 2020). These inequities are linked to other forms of oppression in society (e.g., patriarchy), and they predictably show up in the participation data of instructors we work with, even those who have extensive training in equitable teaching. The data form the basis for our partnership with instructors; we don't force anyone to change, but we provide the tools and guidance needed for instructors to understand and transform their practices.

One of the primary tools we use in our work with faculty is the EQUIP observation tool (Reinholz & Shah, 2018). EQUIP is a free, open source, and highly customizable web app that supports classroom observations and the automatic generation of data analytics. To use EQUIP, the user sets up a classroom roster with student demographics, and each time a student contributes, the user clicks on that student's name to code the nature of their contribution. After all contributions are coded, EQUIP generates a variety of analytics to describe patterns of student participation. EQUIP has been used extensively in both face-to-face and virtual classrooms. In contrast to other tools, EQUIP allows an instructor to see exactly who is participating and how. It answers questions such as these: *How often do Black women in my class participate? How often do I ask high-level questions to Latinx men?* EQUIP provides data analytics at the individual, group, and whole-class levels. The multilevel approach allows instructors to focus both on patterns *between* and *within* racial groups. The tool also can track patterns based on intersectional social markers (e.g., race *and* gender, disability, or first-generation status). Further, because EQUIP tracks changes in practice over time, it also allows instructors to explore questions like *When I implement a new discussion strategy, does it improve racial equity in my class?* EQUIP helps characterize student contributions in classroom discussions and associated teacher actions (e.g., the question used to solicit a student's contribution and the teacher's response). The person coding with EQUIP could be a supportive peer, student researcher, or even an instructor coding their own teaching after it has been recorded.

Racial Equity Learning Communities

Although equity analytics can be implemented in many forms, our predominant approach is to embed analytics into faculty learning communities. A typical community consists of 3-5 faculty members who are supported by a coach and team of student researchers (undergraduate or graduate) across 3-4 reflection cycles. Each cycle consists of 1) observing each instructor's teaching, 2) coding teaching and generating equity analytics, 3) providing individual feedback, and 4) engaging in collective reflection. Student researchers are trained to lead the observations, coding, and provision of feedback. Working together with the coach, students offer holistic support that encompasses access to data, suggestions for concrete changes to teaching, and emotional support. Typically, each student works directly with a few instructors in the learning community, and together, the students support one another to provide meaningful feedback to all instructors. The inclusion of student researchers is a valuable part of the process, because students offer their unique perspectives on the observed lessons, and students themselves benefit from being embedded in meaningful professional learning. Instructors receive individualized feedback in advance of the group reflection meeting so that they have time to process their

results. The group then uses the reflection meeting to process data collectively, discuss teaching strategies, and set goals for the next observation cycle.

Multiple studies have demonstrated how this analytics-based approach can lead to concrete changes in teaching practices and ways of thinking (Reinholz, Bradfield, et al., 2019; Reinholz et al., 2020; Reinholz, Stone-Johnstone, et al., 2019). Instructors have changed their teaching practices in the types of questions they ask, who they ask them to, and what they do with student responses. By setting up intentional structures (e.g., a think-pair-share, waiting for five students to raise their hands, assigning competence[1]), instructors can design participation opportunities to support racially minoritized students. This intentional design contrasts commonly used strategies such as having students just shout out answers and simply calling on the first student who raises their hand, approaches which both tend to favor privileged students and particularly nondisabled White men. As instructors expand their repertoire of equitable practices, they see the participation patterns in their classes change, which sustains their motivation.

Faculty Reflections on Experiences Using EQUIP

Here we further describe how faculty experience the equity analytics process. These reflections represent patterns among the insights that faculty tend to develop by engaging with equity analytics. The following reflections are taken from prior studies on EQUIP (Reinholz et al., 2020; Reinholz, Stone-Johnstone, et al., 2019) and from an ongoing evaluation of the *Data Analytics for Equity* CAREER project currently funded by the National Science Foundation. These reflections show how the EQUIP process helped faculty to question their underlying assumptions and then develop new teaching practices. Participant characteristics for the selected reflections are provided in Table 1.

Table 1. Select Participant Demographics

Name	Race	Gender	Discipline
Alicia	White	Woman	Engineering
Brian	Black	Man	Mathematics
Elayne	White	Woman	Public Health
Kelly	Biracial (White/Black)	Woman	Counseling
Nick	Latinx	Man	Journalism
Sam	White	Man	Engineering

Especially for White faculty, data analytics fostered greater awareness of racial inequities in participation that shaped changes to teaching practices. Alicia described it as an "eye opening experience" to see "white male students dominating" the participation data for her class. Similarly, Sam described how his data revealed the dominance of "outspoken male

[1] Assigning competence is a specific instructional strategy that was developed as a part of Complex Instruction (Cohen & Lotan, 1997). Assigning competence involves recognizing the disciplinary contributions of marginalized (or so-called "low status") students during partner or group work time. When one of these students makes a meaningful contribution, the instructor provides intentional support to help that student productively share their idea in a more public venue. This positive public attention helps raise the status of the student, which further supports their meaningful inclusion and participation later in the lesson and in subsequent lessons.

students," with less participation from "female students, minority students, and international students." With their newfound awareness, both Alicia and Sam began to implement new strategies—intentionally calling on students and assigning competence to lower status students—and the patterns of inequity in their classrooms began to shift. To assign competence, Alicia and Sam actively monitored student participation in breakout groups; when a minoritized student shared an important idea, the instructor primed that student by asking if they would share their idea in the whole-class discussion. This allowed the instructors to intentionally include and support students who were previously being marginalized during whole-class discussions.

Similarly, Elayne described how EQUIP helped her understand "how critical participation is to the learning process." As a result of ongoing reflection on her data, she began to rethink her own role in disrupting patterns of inequity in participation:

> I had also never considered that relying exclusively on large-group interaction could place my own implicit racial biases front-and-center, as it became entirely up to me to choose who to call on and how to respond. Seeing the numbers generated by the EQUIP process showing which students were engaging forced me to confront these truths and reconsider my beliefs about my role in the classroom.

Elayne began to intentionally disrupt these patterns through new strategies such as the intentional use of names, creating shared workspaces, and assigning competence.

Faculty of color also developed new insights about racial equity. For example, Nick described the process as a "journey of assumptions." Due to the ongoing COVID-19 pandemic, Nick was teaching virtually when he participated. Through the EQUIP community, Nick developed new strategies to connect with his students. The online Zoom platform allowed him "see students' names and address them individually," which he couldn't do before in a face-to-face classroom. Using student names, Nick could intentionally disrupt patterns of inequity that were revealed by the EQUIP data. For example, using the data analytics for guidance, he could intentionally assign competence to specific minoritized students by bringing their productive ideas from the breakouts to the whole class debrief.

Brian had a wealth of experience teaching from a racial equity perspective for over a decade before working with EQUIP. For this reason, when he began the work, he "expected to see participation relatively evenly distributed throughout the class." He was "surprised" by the data he received. For example, a recurrent theme is his data was the marginalization of three Filipino men in his class, who became a key focus of his changes in teaching practices. He began to check in with those students during group work time to ensure that they weren't being left out. Reflecting on the experience, he noted:

> My experience with EQUIP helped change the focus of my teaching from thinking about what I was going to do next mathematically, to focusing on who was going to participate next in the classroom and how to build from their contribution…[as faculty] we can talk about equity all day, but…it's a different level to be able to really re-evaluate your practice and step down from that pedestal that we as faculty members like to sit on.

Even as a seasoned educator, the EQUIP community provided a shift in perspective that supported Brian to productively build on his prior experiences. He adopted new teaching

strategies such as reorganizing student groups to break up inequitable patterns, calling on specific students, and probing deeper into student responses to elicit deeper thinking.

We conclude with reflections from Kelly. When Kelly received her data analytics, it surprised her. She realized that she was asking many lower-level recall questions rather than process-oriented questions that *"*tend to elicit the most depth*"* in conversations. She also developed greater awareness of one of her students, a White woman, who tended to dominate in-class discussions. Kelly contrasted her experiences with departmental faculty observations to teaching observations in the EQUIP community:

> Our review and promotion process has mandatory observations…But the evaluation sheet that our observers fill out doesn't have anything to do with equity. Really, it's like, did you meet the course objectives? Do you know, did they seem like an expert? So, I would like to continue to be observed with that lens of equity like they do with EQUIP.

As she describes, Kelly questioned whether faculty peers had the expertise in her content areas to really address their observational focus, and remarked it would be much more valuable to get feedback on patterns of inequity. Kelly also viewed the EQUIP process as something that could be integrated more deeply into her pedagogy to address structural inequities. For example, she shared her data with her students, who were counselors in training, to more concretely tie into issues of racial inequity that they would encounter in schools.

Scaling and Sustaining an Equity Analytics Approach

The above reflections showcase the types of learning and changes to practice that are common among faculty members who participate in an EQUIP community for 1-2 semesters. Our approach contrasts with more surface-level workshops that may improve knowledge but often do not lead to behavioral change. By grounding learning in the analysis of instructors' own classrooms, instructors gained access to concrete and actionable data that led to generative anti-racist teaching practices. Notably, faculty participants only spent about five hours per semester in the learning community; this spaced practice was catalyzed through the effective use of data to foster reflection. Moreover, the observation and feedback process was individualized to faculty and their unique needs. This flexibility allows EQUIP to be adapted across contexts.

The EQUIP community model is designed to be scalable and sustainable. After faculty participate in the program, they can later take on a leadership role as a coach for new cohorts of faculty. Among the participants described above, Brian, Kelly, and Sam later took up roles as coaches working with multiple cohorts. The skills they developed as participants provided them with the foundation to support others. Moreover, working as coaches allowed them to continue deepening their anti-racist teaching practices.

This model can be implemented and scaled with modest resources and campus support. In our prior work, we provided faculty coaches with $1500 stipends and faculty participants with $750 stipends for their semester-long participation. This modest funding helps support the process and provides a token of gratitude to faculty for sharing their time and expertise. To support coaches, student researchers can help with the collection and coding of data. This can be taken up by students in any role, undergraduate to graduate student, with minimal training. Utilizing Learning Assistants, Graders, or Graduate Teaching Assistants is a great way to leverage existing resources to support the approach. These efforts are strongly aligned with the

work of Centers for Teaching and Learning and Centers for Diversity and Inclusion, either of which could serve as the administrative home.

We view EQUIP communities as a potentially important part of a larger systemic effort towards creating anti-racist campuses. These communities provide deeper learning for faculty and support for minoritized students in these faculty members' classrooms. Scaling the model over time with multiple waves of cohorts of participants and leaders might dramatically improve anti-racist teaching. EQUIP communities could be used in conjunction with existing equity initiatives such as support programs for minoritized faculty, stuff, and students; revisions to hiring processes; and adequate reward mechanisms (e.g., through tenure and promotion). While there is a great benefit to institutionalizing equity analytics, we emphasize that this process must be learning oriented. We caution against any use of the analytics that would be evaluative or punitive because it would entirely undermine the vulnerability and trust needed to courageously reflect on one's own racial biases and teaching practices.

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